

R E M A R K S

By this Amendment claims 17-23, 25 and 26 have been amended to better define the invention, and claim 24 has been canceled. Entry is requested.

In the outstanding final Office Action the examiner has rejected claims 17-20, 22, 24-28, 31 and 33-35 under 35 U.S.C. 102(b) as being anticipated by Wesseling, he has rejected claims 21 and 23 under 35 U.S.C. 103(a) as being unpatentable over Wesseling in view of Korhonen et al., he has rejected claim 29 under 35 U.S.C. 103(as) as being unpatentable over Wesseling in view of Hatschek, he has rejected claim 30 under 35 U.S.C. 103(a) as being unpatentable over Wesseling in view of Lichowsky, and he has rejected claim 32 under 35 U.S.C. 103(a) as being unpatentable over Wesseling in view of Asada et al.

The applicants assert that these rejections cannot apply to the amended claims. As described on page 4, lines 6-13, of the present application, all prior art methods relating to "Penaz' principle" have only one single control loop (e.g., PID) for closed-loop operation. This single control loop has to deal with different disturbances described on page 6, line 16 to page 7, line 7 of the application.

In order to enhance the performance of the closed-loop operation, the invention describes concentric interlocking loops which are related to specific disturbances. Fast disturbances (e.g., pressure generation) are related to the inner interlocking loops whereas slower disturbances (e.g.,

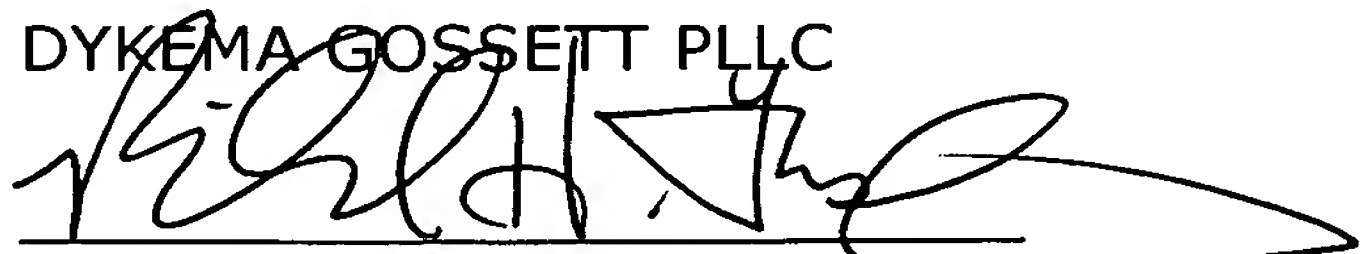
vasodilation or vasoconstriction of the vessels) are handled by outlying loops. Thus, the present invention describes only active closed-loop operation, as a complicated open loop operation is no longer necessary. The functionality which is described in Wesseling is now integrated (in a completely different way) into the interlocking loops. This has the advantage that the inventive mechanism no longer interrupts the measurement. Amended claim 17 now defines concentric first and second loops simultaneously active during closed-loop operation (this responsive to the examiner's comments in item 27 of the outstanding final Office Action).

Favorable reevaluation of this application is requested.

Respectfully submitted,

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